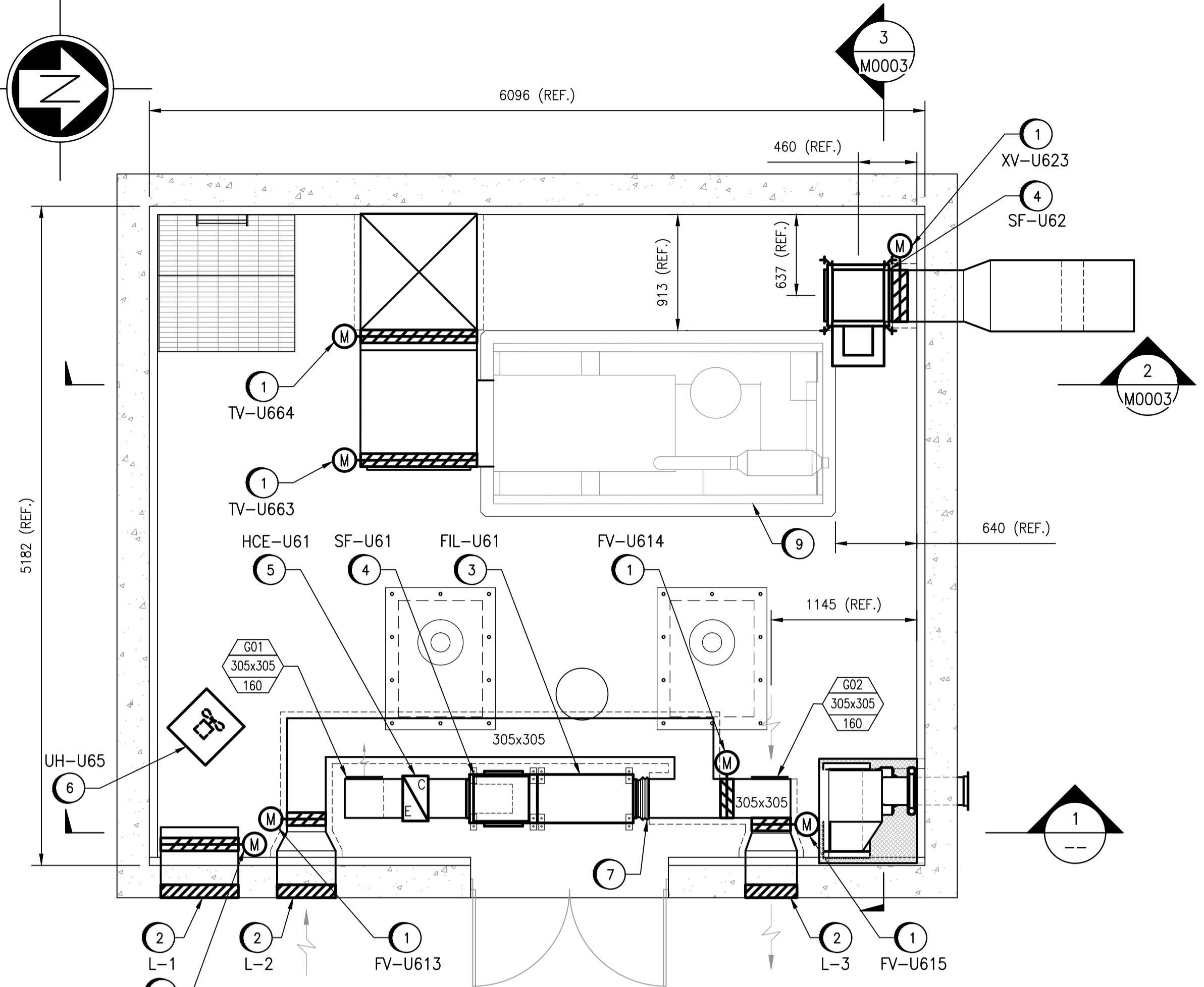


A1 SIZE - 594mm x 841mm



MAIN FLOOR FLOOR PLAN - NEW WORK
SCALE: 1 : 30

LOUVER SCHEDULE

TYPE	SERVICE	SIZE (IN.)	SIZE (mm)	DESCRIPTION
L-1	GENERATOR COOLING INTAKE	24 x 60	610 x 1524	PRICE DE635 C/W INSECT SCREEN
L-2	MAIN FLOOR OUTDOOR AIR	12 x 16	305 x 405	PRICE DE635 C/W INSECT SCREEN
L-3	MAIN FLOOR EXHAUST AIR	12 x 16	305 x 405	PRICE ZE439 C/W INSECT SCREEN
L-4	WET WELL EXHAUST AIR	16 x 16	405 x 405	PRICE ZE439 C/W INSECT SCREEN
L-5	COMBUSTION AIR	12 x 8	305 x 200	PRICE ZE439

GRILLE SCHEDULE

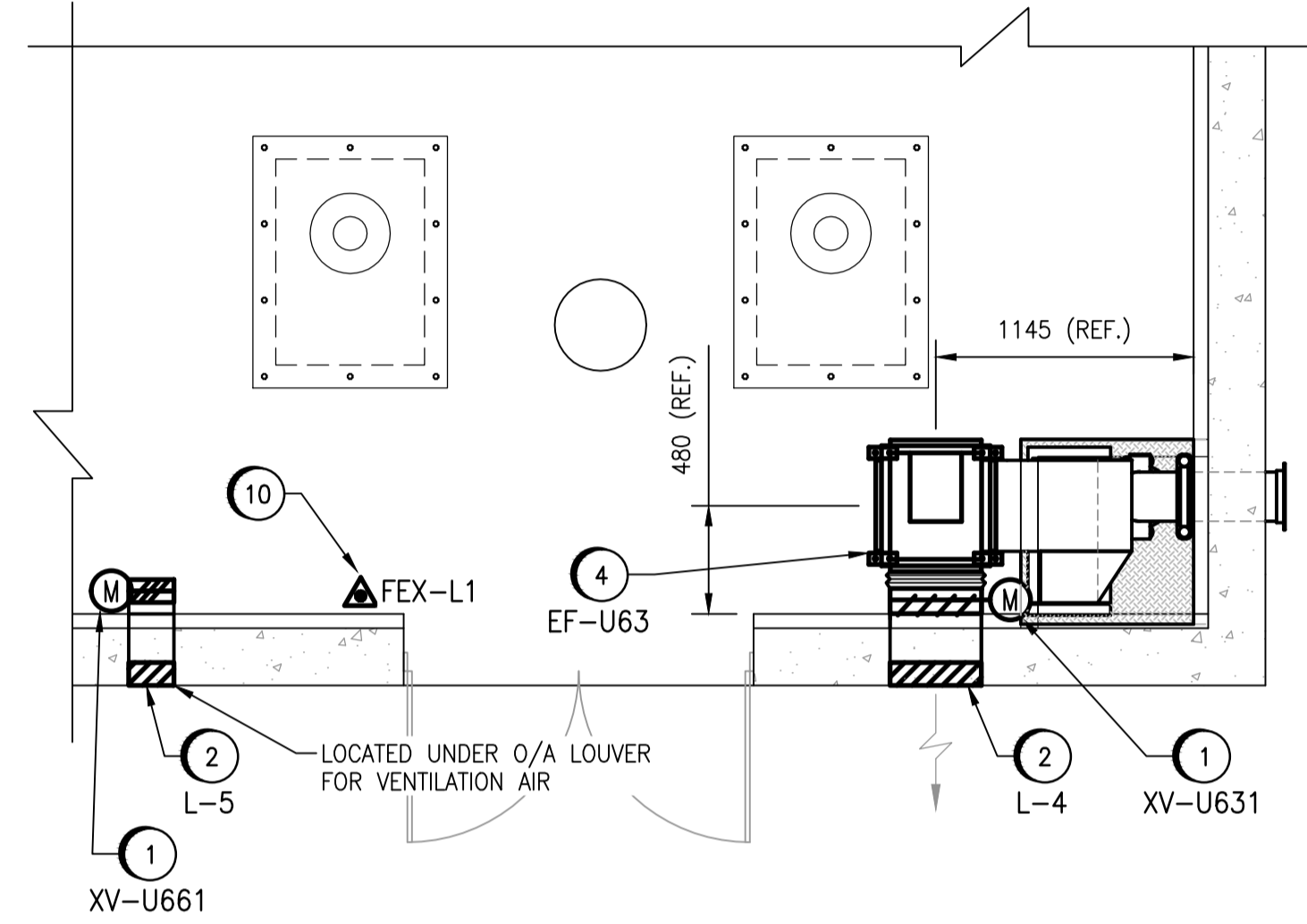
TAG	MAKE & MODEL
G01	PRICE 510/D/F/L/A
G02	PRICE 510/Z/D/A/L

UNIT HEATER SCHEDULE

TAG	SERVICE	MAKE & MODEL	(kW)	VOLTS / PH
UH-U65	MAIN FLOOR	OUELLET OASU 10036	10	575 / 3

FIRE EXTINGUISHER SCHEDULE

TAG	RATING/WEIGHT (MINIMUM)	TYPE	COMMENT
FEX-L1	2A, 5BC, 10LB (4.5 KG)	DRY CHEMICAL	NEW



PARTIAL MAIN FLOOR FLOOR PLAN - EF-U63
SCALE: 1 : 30

- ### GENERAL NOTES:
- SEE STRUCTURAL DRAWINGS FOR WALL PENETRATIONS.
 - INSTALL FIRE EXTINGUISHER IN ACCORDANCE WITH NFPA 10.

LEGEND:

- EXISTING
- NEW WORK
- EXISTING TO BE REMOVED
- EXISTING TO REMAIN
- INSULATED DUCTWORK
- REMOVABLE DUCTWORK
- MOTORIZED DAMPER
- BACKDRAFT DAMPER
- BALANCE DAMPER
- FIRE EXTINGUISHER
- TAG
- WIDTH x HEIGHT (mm)
- FLOW (L/S)

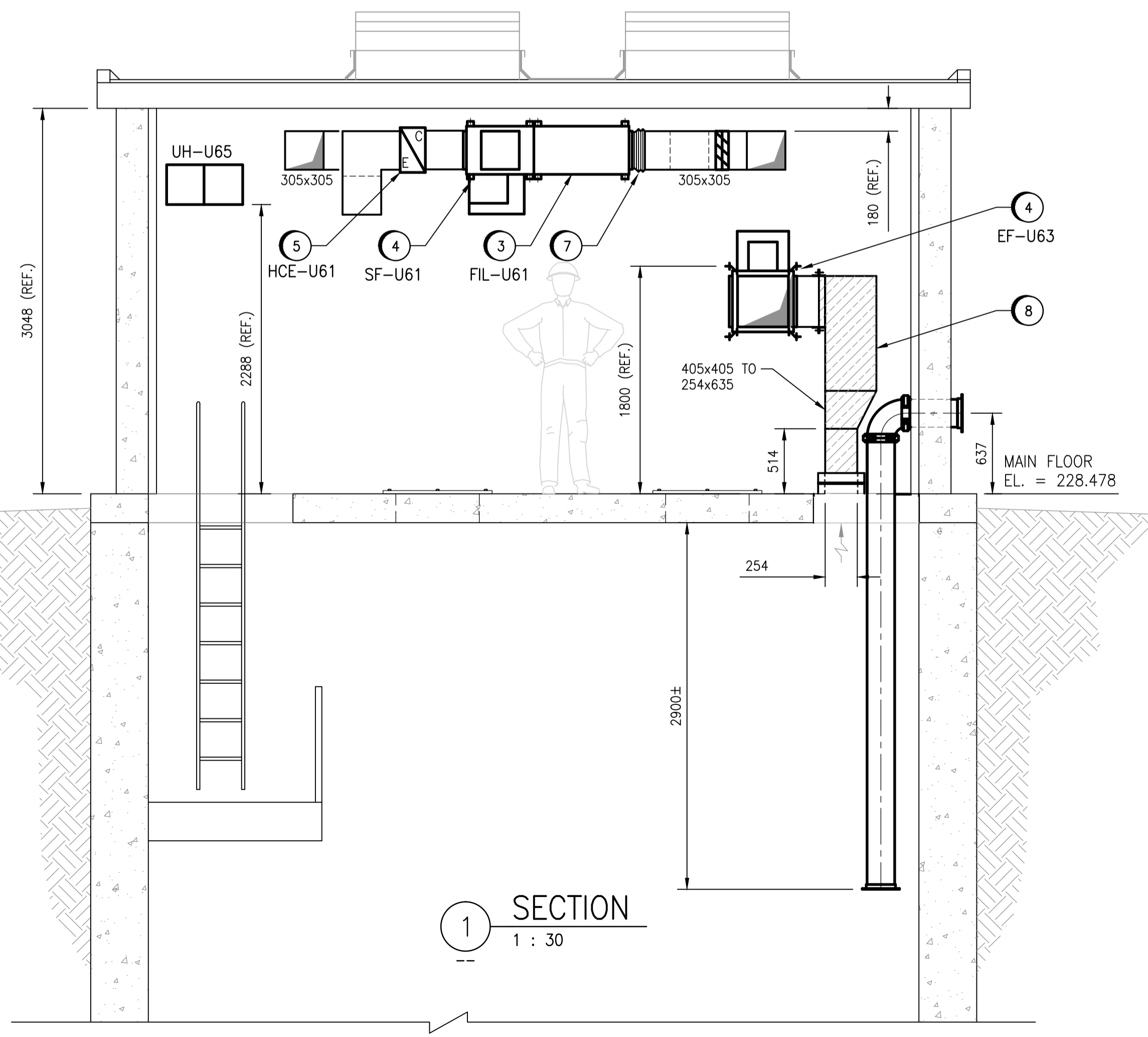
- ### NEW WORK NOTES
- SUPPLY AND INSTALL DAMPERS.
 - SUPPLY AND INSTALL LOUVERS.
 - SUPPLY AND INSTALL FILTER.
 - SUPPLY AND INSTALL FAN.
 - SUPPLY AND INSTALL ELECTRIC DUCT HEATER.
 - SUPPLY AND INSTALL ELECTRIC UNIT HEATER.
 - SUPPLY AND INSTALL FLEX DUCT CONNECTION.
 - SUPPLY AND INSTALL REMOVABLE SECTION OF DUCT TO PROVIDE CLEARANCE/ACCESS FOR TO LOWER LEVEL. REFER TO DETAIL 2 ON DRAWING S0002 FOR BOLTED CONNECTION.
 - NEW GENERATOR AND HOUSEKEEPING PAD. (REFERENCE ONLY, REFER TO ELECTRICAL DRAWINGS). REFER TO DWG M0005 FOR GAS CONNECTION AND EXHAUST PIPING DETAILS.
 - SUPPLY AND INSTALL NEW FIRE EXTINGUISHER.
 - PROVIDE NEW ACTUATORS FOR EXISTING DAMPERS XV-U662 AND XV-U642.

DESIGN CRITERIA:

THE BUILDING ENVIRONMENTAL CONTROL SYSTEMS SHOWN ON THESE DRAWINGS HAVE BEEN DESIGNATED TO THE REQUIREMENTS OF THE MANITOBA BUILDING CODE AND NFPA 820, VENTILATED AT A MINIMUM OF 6 AIR CHANGES PER HOUR CONTINUOUS. WHEN THE STATION IS UNOCCUPIED, THE SYSTEM WILL CONTINUE TO PROVIDE 6 AIR CHANGES PER HOUR WITH 75% RECIRCULATED AIR. THE WET WELL IS VENTILATED AT A MINIMUM OF 12 AIR CHANGES WHEN OCCUPIED AND NO AIR CHANGES WHEN UNOCCUPIED. MORE SPECIFICALLY AS FOLLOWS:

- OUTDOOR CONDITIONS OF -33°C IN WINTER.
- INDOOR CONDITIONS OF 15°C IN WINTER.
- WET WELL SUPPLY AIR AT MINIMUM OF 4°C.

AREA	VOLUME (M³)	MIN. AIR CHANGES PER HOUR	MIN. AIRFLOW (L/s)
MAIN FLOOR	96.3	6	160
WET WELL	188.7	12	629



SECTION 1 : 30

HEATING COIL SCHEDULE

TAG	SERVICE	MAKE & MODEL	AIRFLOW		EAT		LAT		CAPACITY (kW)	SIZE		VOLTS / PH	ELEMENT	NOTES
			(CFM)	(L/S)	(°F)	(°C)	(°F)	(°C)		INCHES	mm			
HCE-U61	MAIN FLOOR	PRICE-DFC100H	340	160	-27	-33	75	24	11	12x12	305x305	575 / 3	OPEN COIL	SCR CONTROL
HCE-U62	WET WELL	PRICE-DFC100H	1,400	661	-27	-33	43	6	36	16x16	405x405	575 / 3	OPEN COIL	SCR CONTROL

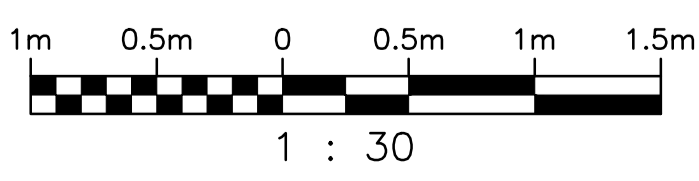
DAMPER SCHEDULE

TAG	SERVICE	AIRFLOW		SIZE (WIDTH x HEIGHT)		BLADE TYPE	MOUNT	ACTUATOR				PRODUCT DESCRIPTION
		(CFM)	(L/S)	INCHES	mm			VOLTS	TORQUE (Nm)	CONTROL SIGNAL	FAIL POSITION	
XV-U662	GENERATOR COOLING INTAKE	5,387	2542	24 x 60	610 x 1524	PB	FLANGE TO DUCT	24 VAC	11.9	ON/OFF	CLOSED	EXISTING DAMPER, NEW ACTUATOR
TV-U664	GENERATOR COOLING EXHAUST	5,387	2542	36 x 36	914 x 914	PB	FLANGE TO DUCT	24 VAC	10.7	0-10V	CLOSED	TAMCO 9000 SC
TV-U663	GENERATOR COOLING RECIRC	5,387	2542	32 x 32	813 x 813	PB	FLANGE TO DUCT	24 VAC	8.4	0-10V	OPEN	TAMCO 1000
XV-U661	COMBUSTION AIR	--	--	12 x 8	305 x 200	PB	REAR FLANGE	24 VAC	0.6	ON/OFF	OPEN	TAMCO 9000 SC
FV-U613	MAIN FLOOR OUTDOOR AIR	340	160	12 x 12	305 x 305	PB	FLANGE TO DUCT	24 VAC	1.2	0-10V	CLOSED	TAMCO 9000 SC
FV-U614	MAIN FLOOR MIXED AIR	340	160	12 x 12	305 x 305	OB	FLANGE TO DUCT	24 VAC	1.2	0-10V	OPEN	TAMCO 1000
FV-U615	MAIN FLOOR EXHAUST AIR	340	160	12 x 12	305 x 305	PB	FLANGE TO DUCT	24 VAC	1.2	0-10V	CLOSED	TAMCO 9000 SC
XV-U623	WET WELL OUTDOOR AIR	1,400	661	16 x 16	405 x 405	PB	FLANGE TO DUCT	120 VAC	2.1	ON/OFF	CLOSED	TAMCO 9000 SC
XV-U631	WET WELL EXHAUST AIR	1,500	708	16 x 16	405 x 405	PB	FLANGE TO DUCT	120 VAC	2.1	ON/OFF	CLOSED	TAMCO 9000 SC
XV-U642	ROOF EXHAUST FAN	--	--	20 x 20	508 x 508	PB	FLANGE TO DUCT	120 VAC	6.6	ON/OFF	CLOSED	EXISTING DAMPER, NEW ACTUATOR

FAN SCHEDULE

TAG	SERVICE	AIRFLOW		ESP		MOTOR		VOLTS / PH	MAKE & MODEL	NOTES
		(CFM)	(L/S)	(WC)	(Pa)	(HP)	(kW)			
SF-U61	MAIN FLOOR SUPPLY AIR	340	160	1.5	375	0.5	0.375	120/1	GREENHECK BSQ-80, C/W FILTER (MERV 8)	C/W SPEED ADJUSTING POTENTIOMETER, INLINE DISCHARGE CONFIGURATION
SF-U62	WET WELL SUPPLY AIR	1,400	661	1.250	310	0.75	0.56	575/3	GREENHECK BSQ-120, C/W FILTER (MERV 8)	INLINE DISCHARGE CONFIGURATION
EF-U63	WET WELL EXHAUST AIR	1,500	708	1.5	375	1.00	0.75	575/3	GREENHECK BSQ-120	C/W ZONE 2 MOTOR, SIDE DISCHARGE CONFIGURATION

APEGM
Certificate of Authorization
SNC-Lavalin Inc.
No. 4489



SNC-LAVALIN INC.
148 Nature Park Way
Winnipeg, MB, Canada R3P 0X7
204-786-8080

DESIGNED BY: H. OJO
DRAWN BY: D. CALVERLEY
SCALE: AS NOTED
DATE: 2017/08/25

CHECKED BY: S. NORSWORTHY
APPROVED BY: B. CLEVEN
ISSUED FOR CONSTRUCTION
DATE:

00 ISSUED FOR TENDER, BID OPP. 475-2018
NO. REVISIONS

ENGINEER'S SEAL

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

METRO ROUTE 20 UNDERPASS PUMPING STATION
2018 UPGRADES
PLANS & SECTION
HVAC
NEW WORK

CITY DRAWING NUMBER: 1-0309U-M0002
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